

PATENT SPECIFICATION

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COMPLETE SPECIFICATION

Balanced Alimentary Compositions

We, GUIDO NOVARO, ROBERTO NOVARO, BRUNO NOVARO, PAOLO NOVARO, MARCO NOVARO and SERGIO CORRADO, all of Italian nationality, trading as GRUPPO OLEARIO NOVARO & Co.—S.in N.C., of Via Tommaso Schiva, 26-R, Oneglia, Imperia, Italy, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The present invention relates to a process for the preparation of alimentary compositions. More particularly, the present invention relates to a process for the preparation of readily digestible and assimilable alimentary compositions, similar to homogenized alimentary compositions, but which contain balanced amounts of proteins, lipids and glucides.

Because babies between the ages of three and twenty-four months might be fed almost exclusively on homogenized alimentary compositions, these compositions must contain amounts of proteins, lipids and glucides which are necessary to provide the babies with balanced diets. However, as homogenized alimentary compositions contain insufficient amounts of lipids, they do not provide a balanced diet when used alone, and for this reason, they are usually accompanied by directions prescribing the addition of olive oil, at the time of use, in order to provide the necessary amount of lipid. The lipid must be added to these compositions in a correct amount in order to give a composition which is balanced in its content of lipid. The manufactures of some homogenized alimentary compositions, however, leave it for the user to determine the correct amount to be added.

In addition, there are available homogenized alimentary compositions which are

storage-stable and convenient to use, but which are not sufficiently sterile to be used for the feeding of young babies.

It is an object of the present invention to provide a process for the preparation of storage-stable, readily digestible and assimilable alimentary compositions which are sufficiently sterile to be used for the feeding of young babies, and which contain balanced amounts of proteins, lipids and glucides.

The compositions produced by the process of the present invention are particularly useful for the feeding of babies. They are also useful for the feeding of adults who are suffering from particular pathological conditions, and in other cases in which readily digestible and assimilable compositions are required.

In accordance with the present invention, there is provided a process for the preparation of an alimentary composition, which comprises reducing alimentary material containing proteins and glucides to a finely divided state, removing substantially all of any fatty substances contained therein, adding an amount of olive oil necessary to produce a balanced alimentary composition prior to or during homogenizing, and thereafter sterilizing the composition.

The alimentary material which is used in the present invention can be natural (i.e. animal or vegetable) or synthetic. It is also possible to use a mixture of such materials. After the material has been reduced to a finely divided state, for example by mincing, substantially all of any fatty substances contained in the finely divided material is removed by mechanical or manual means, or by any suitable chemical or physical method.

The defatted material is preferably salted and/or cooked before addition of olive oil in an amount necessary to produce a balanced alimentary composition. The olive

[Price 4s. 6d.]

oil which is added in accordance with the process of the present invention is a lipid which is digestible and assimilable by the subject to which the resulting alimentary composition is to be fed.

During or after the addition of the olive oil, the composition is homogenized. The composition is thereafter sterilized by any suitable chemical or physical method.

The process of the present invention hereinafter described can be varied, particularly with regard to the possibility of combining two or more steps into a single operation, or of separating one step into two or more operations. For example, the homogenization step can be effected in two or more separate operations, and the olive oil can be added before or during any of these homogenization operations.

The following Examples are given to illustrate the invention and the manner in which it is to be effected.

EXAMPLE 1.

1 kg. of chicken-meat was boned, and substantially all of the fat was manually removed therefrom. The meat produced, substantially free of fat, was minutely-minced in order to facilitate cooking. The meat was salted, and was then cooked for a period of time depending upon the chicken's age and the particular features of its meat. The cooked meat was homogenized in a mixing-homogenizing apparatus until the particles were brought to an almost colloidal condition. 50 Grams of "extra-virgin olive oil" were then added while the homogenization operation was continued, so that the oil was evenly and thoroughly dispersed in the mass. The resulting composition was then divided into 20 equal parts, each of which was placed in a previously sterilized glass pot, which was then hermetically sealed by a previously sterilized metal cap. The pots were placed in an autoclave and the contents of the pots were sterilized by heating. Conventional sterility tests proved the absolute sterility of resulting alimentary composition. Tests on digestibility, assimilability and nourishment value gave better results than homogenized alimentary compositions even those with oil added at the time of use.

EXAMPLE 2.

1 kg. of fresh and mixed vegetables were cleaned by washing to remove impurities without any substantial diminution of the total nourishment value. After mincing, the vegetables were salted, and were then cooked for a time depending on their quality and degree of ripeness. 30 Grams of "extra-virgin olive oil" were then added and the mixture was subjected to homogenization in a mixer-homogenizer until the oil was evenly and thoroughly dispersed in the mass. The mass was subjected to sterilization by ultra-violet radiation, and was then aseptically transferred into previously sterilized containers, which were then hermetically sealed by previously sterilized sealing means. Conventional sterility tests proved the absolute sterility of the resulting alimentary composition. Tests on digestibility, assimilability and nourishment value gave better results than homogenized alimentary compositions even those with oil added at the time of use.

WHAT WE CLAIM IS :—

1. A process for the preparation of an alimentary composition, which comprises reducing alimentary material containing proteins and glucides to a finely divided state, removing substantially all of any fatty substances contained therein, adding an amount of olive oil necessary to produce a balanced alimentary composition prior to or during homogenizing, and thereafter sterilizing the composition.

2. A process as claimed in claim 1, in which the alimentary material is cooked before the addition of the olive oil.

3. A process as claimed in claim 1 or claim 2, in which the alimentary material is salted before the addition of the olive oil.

4. A process for the preparation of an alimentary composition substantially as hereinbefore described with reference to Example 1 or Example 2.

5. Alimentary compositions when prepared by the process as claimed in any one of the preceding claims.

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